

ABSTRACT

An imaging and illuminating engine for an optical code reader to illuminate and image remote target indicia, such as an optical code, is provided. The engine includes an image sensor for receiving reflected illumination from the remote indicia and an illumination assembly for providing illumination of the remote indicia. The illumination assembly is capable of providing a plurality of different outputs, such as light having different wavelengths. The illumination assembly can also be provided with a single illuminating device for providing one illumination output for illuminating substantially the entire field of view. A transmissive, optical element overlays the engine for preventing light generated by the illumination assembly from reflecting back towards the image sensor. The imaging engine is an integrated circuit package configured for easily interfacing within an optical code reader as a plug-and-play component.